

REMARKS

Reconsideration of the application is requested.

Applicant acknowledges the Examiner's acceptance of the drawings filed on August 30, 2001. In "Specification" on page 2 of the above-identified Office Action, the Examiner objected to the specification because of three (3) informalities. Unfortunately, the applicant does not understand the need for the replacement of "current signal Us1" with -- current signal Is1 -- or "voltage signal Vs1" with -- voltage signal Vs1 -- or "current signal Us2" with -- current signal Is2 - and respectfully requests clarification from the Examiner before the suggested corrections can be made. More specifically, the suggested voltage signal substitution appears to be identical to the original item and the "Us1" and "Us2" terms are consistent with their use in the amended Fig. 3 and the specification.

Applicant acknowledges the Examiner's confirmation of receipt of applicant's certified copy of the priority document for the German Patent Application 100 42 585.2, filed August 30, 2000 supporting the claim for priority under 35 U.S.C. § 119.

Claims 15-32 are now in the application. Claims 15, 17, 22, 24, and 29 have been amended. Claims 31 and 32 have been added. Claim 1-14 and 16 have been canceled.

In "Claim Rejections - 35 USC § 112" on page 3 of the above-identified Office Action, claims 24-25 have been rejected as being indefinite under 35 U.S.C. § 112, first paragraph.

More specifically, the Examiner states, "while being enabling for first evaluation circuit" including a further resistor RS connected in series with the regulatable resistor T3, the specification allegedly "does not reasonably provide enablement for second evaluation circuit including a further resistor RS connected in series with said regulatable resistor T3." Applicant has amended claim 24 to replace "second" with "first" according to Examiner's recommendation.

In the third paragraph on page 4 of the above-identified Office Action, claims 22, 24-25 have been rejected as being indefinite under 35 U.S.C. § 112, second paragraph.

More specifically, the Examiner states, "regarding, claim 22 it is not clear how first and second transistor(s) are connected to each other and/or with current sensing transistor. It is also not clear how/why output signal of

comparator drives these two transistors." Additionally, the Examiner asserts that there is insufficient antecedent basis for "said comparator" in claim 22. Claim 22 has been amended accordingly

As the second evaluation circuit illustrated in Fig. 3 includes resistor R2 in series with T4 and not RS with T3, the Examiner felt that claim 24 was previously indefinite.

Support for the changes may be found on pages 7-12 of the specification of the instant application and in the claims.

It is accordingly believed that the specification and the claims meet the requirements of 35 U.S.C. § 112, first / second paragraphs. The above-noted changes to the claims are provided solely for clarification or cosmetic reasons. The changes are neither provided for overcoming the prior art nor do they narrow the scope of the claim for any reason related to the statutory requirements for a patent.

In "Claim Rejections - 35 USC § 103" on page 4 of the above-identified Office Action, claims 15-28 have been rejected as being obvious over Applicant's admitted prior art in view of U.S. Patent No. 6,140,928 to Shibuya (hereinafter '928) under 35 U.S.C. § 103(a).

The rejection has been noted and the claims have been amended in an effort to even more clearly define the invention of the instant application. Support for the changes is found in Figs. 2 and 3, in the claims, and on pages 6-12 of the specification of the instant application.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful. Claim 15 calls for, *inter alia*, a circuit configuration including:

a load transistor having a load path and a voltage across the load path coupled to a current sensing transistor; and

a switch configuration including at least one switch driven according to the voltage across the load path of the load transistor, the switch being configured to connect the current sensing transistor to first or second evaluation circuits.

The applicant's described prior art is illustrated in Fig. 1 and discloses a current sense circuit arrangement. The current circuit arrangement has a load transistor T1S connected with a load Z1S. Arranged in parallel with the load

transistor T1S is a current sensing transistor T2S. A transistor T3S and a current sensing resistor Z2S are connected downstream from the current sensing transistor T2S. The transistor T3S is driven by a comparator K1S, which compares the source potentials of the load transistor T1S and of the current sensing transistor T2S to set them to the same value. The current I2 through the current sensing transistor T2S is then proportional to the current I1 through the load transistor T1S. The actual ratio of these two currents depends on the ratio of the dimensions of the load transistor T1S to the dimensions of the current sensing transistor T2S.

Clearly, as the above-identified Office Action concedes, the applicant's described prior art does not teach or suggest a second evaluation circuit as recited in claim 1 of the instant application, nor does the applicant's described prior art include a switch configuration including at least one switch for receiving a control signal as recited in claim 1 of the instant application. Among other things, the switch configuration of the instant application allows the current sensing transistor to be connected to an evaluation circuit selected according to the control signal.

The '928 reference discloses a circuit configuration for measuring the remaining battery capacity. More specifically,

the circuit configuration of '928 includes a current measuring circuit 10 for measuring the charge and discharge of the battery 1, a voltage measuring circuit 30 for measuring the voltage above the battery 2, a driver circuit 40 for activating the semiconductor switch 3 connected in series to the battery and a power circuit configuration 50 for an energy conservation operation (see Fig. 1 of '928 and col. 7, lines 43-52). Furthermore, the power circuit configuration 50, in order to reduce the power consumption, selectively supplies power to the current measuring configuration 10, the overcurrent detection circuit 20, and the voltage measuring configuration 30 (see col. 17, lines 46-51). As such, the power circuit configuration 50 does not connect a current sensing transistor to a selected evaluation circuit according to a control signal, rather the power circuit configuration 50 functions to reduce power consumption.

Clearly, '928 does not show a "switch configuration including at least one switch . . . connecting said current sensing transistor to a selected evaluation circuit" as recited in claim 15 of the instant application.

New claims 31 and 32 clarify the association between the comparator and the switch. Clearly, '928 does not show a

transistor "to be driven in dependence on an output signal" of a comparator as recited in claims 31 and 32 of the instant application.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claim 15. Claim 15 is, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claim 15.

Finally, applicant appreciatively acknowledges the Examiner's statement that claims 29 and 30 "would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims." In light of the above, applicants respectfully believe that rewriting of claim 30 is unnecessary at this time. However, claim 29 has been rewritten in independent form and is accordingly believed to be in condition for immediate allowance.

In view of the foregoing, reconsideration and allowance of claims 15, 17-32 are solicited.

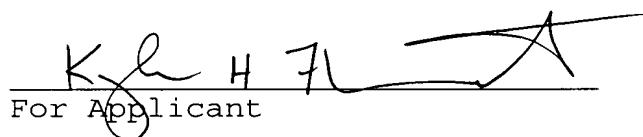
Appl. No. 09/943,589
Amdt. Dated October 20, 2003
Reply to Office Action of June 18, 2003

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out.

Petition for extension is herewith made. The extension fee for response within a period of one month pursuant to Section 1.136(a) in the amount of \$110.00 in accordance with Section 1.17 is enclosed herewith.

Please charge any other fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,


For Applicant

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Attachments: Replacement Sheet

Annotated Sheet Showing Changes

KHF:cgm

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